

ABSTRACT

The present invention provides a scanning probe microscope that is straightforward to use under severe environments. Optical fiber irradiates light from a laser diode towards the surface of a cantilever. The irradiated light is converged by a lens
5 so as to irradiate the surface of the cantilever. Light reflected from the surface of the cantilever is focused by the lenses and inputted to optical fibers. Light passing through the optical fibers is then received by the photodiodes. Inclination of the cantilever is then detected based on changes in the amount of light received.